UNITED STATES PATENT AND TRADEMARK OFFICE

APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
10/058,397	01/28/2002	Michael Wayne Brown	AUS920010520US1	4747

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EXAMINER
ZHOU, TING

ART UNIT	PAPER NUMBER
2173	

DATE MAILED: 08/25/2004

Please find below and/or attached an Office communication concerning this application or proceeding.

PTO-90C (Rev. 10/03)

	Application No.	Applicant(s)
Office Action Summary	10/058,397	BROWN ET AL.
	Examiner	Art Unit	
	Ting Zhou	2173	

-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --

Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE *3* MONTH(S) FROM
THE MAILING DATE OF THIS COMMUNICATION.
- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed
  after SIX (6) MONTHS from the mailing date of this communication.
- If the period for reply specified above is less than thirty (30) days, a reply within the statutory minimum of thirty (30) days will be considered timely.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133).
  Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any
  earned patent term adjustment. See 37 CFR 1.704(b).

Status

1)☐ Responsive to communication(s) filed on _____.
2a)☐ This action is **FINAL**.   2b)☒ This action is non-final.
3)☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is
closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

Disposition of Claims

4)☒ Claim(s) *1-27* is/are pending in the application.
  4a) Of the above claim(s) _____ is/are withdrawn from consideration.
5)☐ Claim(s) _____ is/are allowed.
6)☒ Claim(s) *1-27* is/are rejected.
7)☐ Claim(s) _____ is/are objected to.
8)☐ Claim(s) _____ are subject to restriction and/or election requirement.

Application Papers

9)☐ The specification is objected to by the Examiner.
10)☒ The drawing(s) filed on *28 January 2002* is/are: a)☒ accepted or b)☐ objected to by the Examiner.
  Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).
  Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).
11)☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

Priority under 35 U.S.C. § 119

12)☐ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
  a)☐ All b)☐ Some * c)☐ None of:
    1.☐ Certified copies of the priority documents have been received.
    2.☐ Certified copies of the priority documents have been received in Application No. _____.
    3.☐ Copies of the certified copies of the priority documents have been received in this National Stage
      application from the International Bureau (PCT Rule 17.2(a)).
  * See the attached detailed Office action for a list of the certified copies not received.

Attachment(s)

1) ☒ Notice of References Cited (PTO-892)
2) ☐ Notice of Draftsperson's Patent Drawing Review (PTO-948)
3) ☒ Information Disclosure Statement(s) (PTO-1449 or PTO/SB/08)
  Paper No(s)/Mail Date *1/28/2002*.
4) ☐ Interview Summary (PTO-413)
  Paper No(s)/Mail Date. _____ .
5) ☐ Notice of Informal Patent Application (PTO-152)
6) ☐ Other: _____.

DETAILED ACTION

Claim Rejections - 35 USC § 102

The following is a quotation of the appropriate paragraphs of 35 U.S.C. 102 that form the

basis for the rejections under this section made in this Office action:

> A person shall be entitled to a patent unless –
>
> (b) the invention was patented or described in a printed publication in this or a foreign country or in public use or on sale in this country, more than one year prior to the date of application for patent in the United States.

1.   Claims 1-3, 5-6, 8-12, 14-15, 17-21, 23-24 and 26-27 are rejected under 35 U.S.C. 102(b)

as being anticipated by Sciammarella U.S. Patent 6,081,266.

Referring to claim 1, 10 and 19, Sciammarella teaches a method, system and program

comprising a graphical user interface (column 1, lines 5-11 and Figure 2), detecting a graphical

characteristic of at least one displayable object within a user interface (detecting a feature of a

graphical object on the display screen, such as the size or location of the graphical object)

(column 1, lines 48-57 and column 2, lines 52-63), and adjusting an audio output of a sound

associated with the at least one displayable object to reflect the graphical characteristic, such that

the audio output is specified according to a graphical display within the user interface (adjusting

the volume of a particular sound associated with the graphical object in correspondence with the

characteristic of the graphical object) (column 3, lines 20-40).

Referring to claims 2, 11 and 20, Sciammarella teaches detecting the graphical

characteristic of the at least one displayable object, wherein the graphical characteristic

comprises a graphical position of the at least one displayable object (user manipulating the

position, or location of the graphical object on the screen) (column 2, lines 52-63, column 4, lines 5-18 and column 4, lines 50-67 through column 5, lines 1-10).

Referring to claims 3, 12 and 21, Sciammarella teaches adjusting the audio output of the sound, wherein a positional source of the audio output reflects the graphical position of the at least one displayable object (adjusting the audio output of the sound associated with the graphical object by manipulating the position, or location of the graphical object on the screen) (column 2, lines 52-63, column 4, lines 5-18 and column 4, lines 50-67 through column 5, lines 1-10).

Referring to claims 5, 14 and 23, Sciammarella teaches detecting the graphical characteristic of the at least one displayable object, wherein the graphical characteristic is determined by a resource utilization of the at least one displayable object (adjusting the audio output according to the detected size of the graphical object, or the amount of screen space utilized by the graphical object) (column 3, lines 20-40).

Referring to claims 6, 15 and 24, Sciammarella teaches adjusting the sound according to an environmental effect associated with the at least one displayable object (adjusting the volume of the output sound according to an environmental effect of the graphical object, such as a change in size or location of the object) (column 3, lines 20-40 and column 4, lines 7-16).

Referring to claims 8, 17 and 26, Sciammarella teaches adjusting the audio output of the sound according to user audio preferences (the user can drag the graphical object from one side of the screen to another to adjust the audio balance between the left and right channels) (column 4, lines 50-67 through column 5, lines 1-10).

Referring to claims 9, 18 and 27, Sciammarella teaches adjusting the audio output of the

sound associated with the at least one displayable object to reflect the graphical characteristic,

wherein a positional source of the audio output reflects a position of the at least one displayable

object (adjusting the position source of the audio output, or the balance between the left and right

audio output channels to reflect the corresponding position of the graphical object) (column 4,

lines 50-67 through column 5, lines 1-10).

Claim Rejections - 35 USC § 103

The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all

obviousness rejections set forth in this Office action:

> (a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in
> section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are
> such that the subject matter as a whole would have been obvious at the time the invention was made to a person
> having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negatived by the
> manner in which the invention was made.

2.   Claims 4, 7, 13, 16, 22 and 25 are rejected under 35 U.S.C. 103(a) as being unpatentable

over Sciammarella U.S. Patent 6,081,266, as applied to claims 1, 10 and 19 above, and further in

view of Gibson U.S. Patent 5,812,688.

Referring to claims 4, 13 and 22, Sciammarella teaches all of the limitations as applied to

claims 1, 10 and 19 above. Specifically, Sciammarella teaches detecting the graphical

characteristic of the at least one displayable object (detecting a feature of a graphical object on

the display screen, such as the size or location of the graphical object) (Sciammarella: column 1,

lines 48-57 and column 2, lines 52-63). However, Sciammarella fails to explicitly teach the

graphical characteristic comprises a transparency of the at least one displayable object. Gibson

teaches an interface that adjusts the audio output according to graphical characteristics of displayed objects (correlating selected audio characteristics of the audio signal to selected visual characteristics of the visual image) (Gibson: column 3, lines 15-24) similar to that of Sciammarella. In addition, Gibson further teaches detecting the graphical characteristic of the at least one displayable object, wherein the graphical characteristic comprises a transparency of the at least one displayable object (using the visual transparence or translucence of graphical objects to enable multiple sounds from a plurality of objects to be heard simultaneously and distinctly) (Gibson: column 6, lines 15-20 and column 7, lines 19-30). It would have been obvious to one of ordinary skill in the art, having the teachings of Sciammarella and Gibson before him at the time the invention was made, to modify the interface for adjusting the audio output according to graphical characteristics of Sciammarella to include the characteristic of transparency, as taught by Gibson. One would have been motivated to make such a combination in order to utilize visual images of sounds to control and mix all types of sounds, while allowing the sounds to still be heard distinctly, to achieve a desired sound product.

Referring to claims 7, 16 and 25, Sciammarella teaches all of the limitations as applied to claims 1, 10 and 19 above. Specifically, Sciammarella teaches adjusting the audio output of the sound associated with the at least one displayable object (adjusting the volume of a particular sound associated with the graphical object in correspondence with the characteristic of the graphical object) (Sciammarella: column 3, lines 20-40). However, Sciammarella fails to explicitly teach adjusting the audio output of the sound according to a relative z-order position of the at least one displayable object. Gibson teaches an interface that adjusts the audio output according to graphical characteristics of displayed objects (correlating selected audio

characteristics of the audio signal to selected visual characteristics of the visual image) (Gibson: column 3, lines 15-24) similar to that of Sciammarella. In addition, Gibson further teaches adjusting the audio output of the sound associated with the at least one displayable object according to a relative z-order position of the at least one displayable object (correlating an aspect of the audio output signal, such as volume, with the z-location of the sphere in the three-dimensional graphical space shown in Figures 5 and 7a-7b) (Gibson: column 5, lines 34-44 and column 6, lines 10-14). It would have been obvious to one of ordinary skill in the art, having the teachings of Sciammarella and Gibson before him at the time the invention was made, to modify the interface for adjusting the audio output according to graphical characteristics of Sciammarella to include the characteristic of the relative z-order position of the object, as taught by Gibson. One would have been motivated to make such a combination in order to utilize visual images of sounds to control and mix all types of sounds, while allowing the sounds to still be heard distinctly, to achieve a desired sound product.

3.   The prior art made of record on form PTO-892 and not relied upon is considered pertinent to applicant's disclosure. Applicant is required under 37 C.F.R. § 1.111(c) to consider these references fully when responding to this action. The documents cited therein teach similar methods of adjusting an audio output according to characteristics of a graphical object.
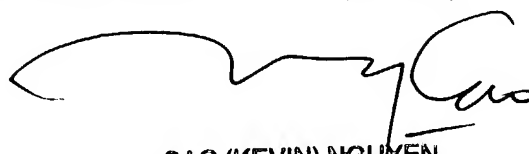
Conclusion

Any inquiry concerning this communication or earlier communications from the examiner should be directed to Ting Zhou whose telephone number is (703) 305-0328. The examiner can normally be reached on Monday - Friday 8:00 am - 5:30 pm.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, John Cabeca can be reached on (703) 308-3116. The fax phone number for the organization where this application or proceeding is assigned is (703) 872-9306.

Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see http://pair-direct.uspto.gov. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free).

4 August 2004

CAO (KEVIN) NGUYEN
PRIMARY EXAMINER